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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

ZHONG, CHAD

ART UNIT

PAPER NUMBER

2152

DATE MAILED: 02/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/783,770

Applicant(s)

HARVEY ET AL.

Examiner

Chad Zhong

Art Unit

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 November 2005.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-4,6,7,18-27,29,30,41,43-46,48,49,60 and 62 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 2-4,6,7,18-27,29,30,41,43-46,48,49,60 and 62 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### FINAL ACTION

1. In response to amendment filed 11/16/2005, claims 18-25, 29-30, 41, 43, 48-49, and 62 are currently amended. The action has been made final.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 3, 6-7, 18-24, 26, 29-30, 41, 43, 45, 48-49, 60, and 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mishra et al. (hereinafter Mishra), US 6,910,070 in view of Peters, US 2002/0087594, further in view of what was well known in the art (hereinafter Well-Known).

4. As per claim 21, Mishra teaches a method of automatically subscribing a network device (Mishra, abstract, wherein the clients are subscribing to events) in a network to a plurality of events applicable to a logical group of which the network device is a member (Mishra, Col. 5, lines 20-32, wherein each agent is subscribing on behalf of a group of clients, the clients 370, 372, 374, 376 that may forms a logical grouping), comprising the computer implemented steps of:

creating and storing a mapping (Mishra, Col. 5, lines 25-40, the mapping is the names schema 330) that associates a plurality of network devices (clients) with the logical group (agent) that can pass over an event bus (Mishra, Fig 3, item 315, wherein the channel is the event bus) to which the network device communicates;

receiving an event subscribe request from the network device (through an agent) that includes a network device identifier (Mishra, names schema stores the network device ID, Col. 5, lines 35-40; Col.

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9, lines 45-50) that uniquely identifies the network device and an event identifier (Mishra, event identifier is the event of interest, see for example, Col. 5, lines 20-25);

looking up the network device identifier and the event identifier in the mapping (Mishra, event trigger 314 looks up the subscription event and upon detection notify the channel 315, Col. 5, line 60 to Col. 6, line 13; device identifier looked up in name schema for delivery locations, see Col. 6, lines 20-30; Col. 5, lines 20-25);

Mishra does not explicitly teach:

in response to receiving the event subscribe request:

receiving an event subject list in response thereto, wherein the subject list identifies all subjects that are available using the event bus and to which the network device should subscribe;

sending information to the event bus that requests the event bus to subscribe the network device to all events in the subject list.

and router.

However, in a similar system, Peters teaches the concept of generating a list in response to a subscription request and sending the list to a publisher to subscribe clients to corresponding lists (Peters, [0006], [0032-0033]), this list contains identifiers of the clients and the contents/advertisements the subscribers should subscribe to. The list is sent to the content provider, where individualized advertisement based on user identification is pushed down to the subscribers (Peters, [0035-0037]).

In addition, Official Notice is taken (see MPEP 2144.03) router is well known and routinely used for routing data packets at the time of the invention was made.

It would have been obvious to the person of ordinary skill in the art at the time of the invention to incorporate Peters with Mishra because the combination would lead to reduced burden on the network device as the subscription list is centrally stored on a remote network device. Furthermore, it would have been obvious to one of ordinary skill in the art to include router with Mishra because it would provide for

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efficient network topology across different domains in order to route information to appropriate locations across two distinct networks, thus, placing router in place of network devices allows for inter-network communications.

5. As per claim 3, Mishera – Peters – Well-Known disclose the invention substantially as rejected in claim 21 above, including receiving application specific mapping information from an application program and updating the mapping using the application specific mapping information (Mishera, Col. 6, lines 55-63, wherein application specific protocols are sent back to the subscribing clients, mapping is updated in Col. 10, lines 15-25).

6. As per claim 6, Mishera – Peters – Well-Known disclose the invention substantially as rejected in claim 21 above, including sending information comprises generating, based on the mapping, a list of all the events that are in the mapping and associated with the network device, and sending the list to an event gateway that is coupled to the event bus (Mishera, wherein the device specific events are passed from the server 318 on to channel 315, and forward to appropriate agents representing client devices, Col. 10, lines 15-25, Col. 5, lines 20-33).

7. As per claim 7, Mishera – Peters – Well-Known disclose the invention substantially as rejected in claim 21 above, including the mapping comprises an association of stored values that identify for each of the network devices (Mishera, Col. 9, lines 45-50), an application (Mishera, Col. 6, lines 55-65), a group identifier (Mishera, Col. 5, lines 20-33), an event of the one or more events (Mishera, Col. 5, lines 60-67), a network device identifier (Mishera, Col. 9, lines 45-50), one or more published events, and one or more subscribed events (Mishera, the published and subscribe events are events subscribed by agents, Col. 5, lines 20-33, and published by trigger 314, Col. 5, lines 60-67).

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8. As per claim 18, Mishera – Peters – Well-Known disclose the invention substantially as rejected in claim 21 above, including receiving the device identifier comprises receiving a publish request that includes a network device identifier for one of the network devices in the logical group (Mishera, Col. 5, lines 35-40) or a group identifier of the logical group, and an event identifier (Mishera, Col. 5, lines 20-33).

11. As per claim 19, Mishera – Peters – Well-Known disclose the invention substantially as rejected in claim 18 above, including sending information comprises looking up the network device identifier (Mishera, look ups are done against schema 330, Col. 5, lines 34-45), or the group identifier, and the event identifier in the mapping (Mishera, Col. 5, lines 60 – Col. 6, line 20) and receiving a subject list in response thereto (Mishera, the list comprising of events that are of interest to the subscribers, Col. 6, lines 64-67; users may further dictate the time to send the subscribed events causing a list to be sent back and list to keep track of history of events, see for example, Col. 8, line 60 – Col. 9, line 5, Col. 9, lines 25-33).

12. As per claim 20, Mishera – Peters – Well-Known disclose the invention substantially as rejected in claim 18 above, including sending information comprises looking up the network device identifier (Mishera, look ups are done against schema 330, Col. 5, lines 34-45), or the group identifier, and the event identifier in the mapping (Mishera, Col. 5, lines 60 – Col. 6, line 20), receiving a subject list in response thereto, and applying the subject list to the network device at the event gateway (Mishera, the list comprising of events that are of interest to the subscribers, Col. 6, lines 64-67; users may further dictate the time to send the subscribed events causing a list to be sent back and list to keep track of history of events, see for example, Col. 8, line 60 – Col. 9, line 5, Col. 9, lines 25-33).

13. As per claim 22, the claim is rejected for the same reasons as rejection to claim 21 above.

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14. As per claim 23, the claim is rejected for the same reasons as rejection to claim 21 and 22 above.
15. As per claim 24, the claim is rejected for the same reasons as rejection to claim 21 and 22 above.
16. As per claims 26, 29-30, 41, 43, the claims are rejected for the same reasons as rejection to claims 3, 6-7, 18, 20 above respectively.
17. As per claims 45, 48-49, 60, 62, the claims are rejected for the same reasons as rejection to claims 3, 6-7, 18, 20 above respectively.
18. Claims 2, 4, 25, 27, 44, 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mishra – Peters – Well-Known, in view of Fukumoto et al. (hereinafter Fukumoto), JP 2000-207362 (Previously cited in PTO-892 dated 4/11/2004).
20. As per claim 2, Mishra – Peters – Well-Known disclose the invention substantially as rejected in claim 21 above, including associated with the network device an event gateway (Mishra, the gateway here is the agents that represent and subscribe on behalf of clients, Col. 5, lines 20-25) that is coupled to the event bus.

However, Mishra – Peters – Well-Known do not explicitly disclose subscribing the network device to all the events that are in the mapping.

In a similar system, Fukumoto teaches the concept of authenticating of an Internet user based on a list. Specifically, the list is used to match up user's ID and password, upon proper authentication of individual users, the events corresponding to particular users will be subscribed to the appropriate servers, e.g. event-device mapping (Fukumoto, [0006], [0007], [0022]).

It would have been obvious to the person of ordinary skill in the art at the time of the invention to incorporate teachings Fukumoto with Mishra – Peters – Well-Known because the combination would

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lead to reduced burden on the network device as the subscription list is centrally stored on a remote network device, thus increase the efficiency of management.

21. As per claim 4, Mishera – Peters – Well-Known does not explicitly teach receiving application-specific mapping information from an application program in XML format using a data access component that transforms the application-specific mapping information from XML format into a canonical object model format.

However, it would have been obvious to the person of ordinary skill in the art at the time of the invention to have used XML programming language to implement Mishera's system to promote cross platform compatibility. Moreover, conversion from XML format into a canonical object model format would have been obvious since both formats are platform independent, conversion into a canonical object model would improve Mishera's system since a canonical data model is a data model independent of any application. For example, a canonical model might use a standard format for dates, such as MM/DD/YYYY. Rather than transforming data from one application's format directly to another application's format, you transform the data from the various communicating applications to this common canonical model. You write new applications to use this common format and adapt legacy systems to the same format. Thus increasing the flexibility of Mishera's system.

22. As per claim 25 and 27, the claims are rejected for the same reasons as rejection to claims 2 and 4 above.

23. As per claim 44 and 46, the claims are rejected for the same reasons as rejection to claims 2 and 4 above.

#### ***Response to Arguments***

24. Applicant's remarks filed 11/16/2005 have been considered but are found not persuasive in



view at the new grounds at rejection necessitated by Applicant's amendment.

25. In the remark, the applicant argued in substance:

a) Mishra – Peters does not teach “receiving a subject list in response thereto, that subject list is automatically generated after the first event subscription request is received”.

b) Mishra – Peters does not provide proper reasons to combine with each other

c) Mishra does not teach “creating and storing a mapping that associates a plurality of routers with the logical group that associates the logical group with one or more events that can pass over an event bus to which the router communicates”

In response to Applicant's arguments

a) It is noted that the features upon which applicant relies (i.e., automatically generate after first event subscription request is received) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Moreover, even if the ‘generate aspect’ was part of the limitation, Mishra – Peters would still read on this limitation. Specifically, Mishra discloses a subscription request in a publisher subscriber system, (Mishra, Col. 5, lines 20-40); referring now to Peters, Peters discloses a publisher subscriber advertising system, where the publisher generate a list based on the subscriber information supplied to the publisher by other sources, (Peters, i.e. advertisers, [0036-0037]), thus, Mishra – Peters teaches the current claim.

b) Mishra – Peters both deals with publisher subscriber systems, both invention has a central database used as publisher as well as subscribers subscribing to events. The claimed router is considered as design choice, the main purpose of the invention is an improvement in the publisher subscriber art, rather than an improvement for a router system.

c) Mishra teaches at least two levels of association. The first level deals is when the agent acting as a gateway, subscribing to events on behalf of the clients (Col. 5, lines 20-30), the resulting

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subscriptions 320 is sent to the publisher side. The second level of association occurs on the publisher side, where subscriptions 320 containing delivery information pertaining to the event requestor are associated with names schema 330. Thus, Mishra teaches at least two levels of association between the publisher and the subscribers.

26. **THIS ACTION IS MADE FINAL.** Applicant is reined of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### *Conclusion*

27. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents and publications are cited to further show the state of the art with respect to method of providing router with subnetwork address pool in a cellular telecommunications network.

- |      |                |                 |
|------|----------------|-----------------|
| i.   | US 6404237     | Luo et al.      |
| ii.  | US 20020087878 | Ballen et al.   |
| iii. | US 6710702     | Averbuch et al. |
| iv.  | US 5873084     | Bracho et al.   |
| v.   | US 6477585     | Cohen et al.    |

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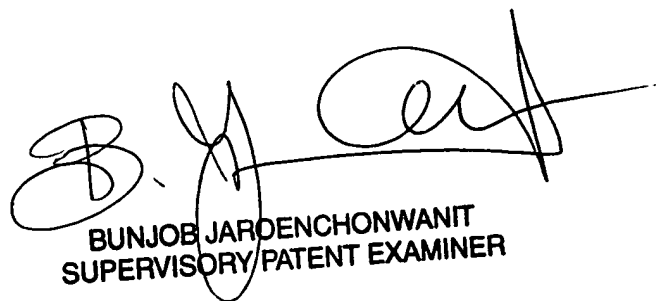
- vi. US 5959989 Gleeson et al.
- vii. "Publish and subscribe meets the Internet", Loshin, P., Byte (International Edition), Vol. 23, no. 2, p.125-8.
- viii. "TIBCO software deliver wireless information services in Ericsson Solutions", July 1999, Ericsson Press Release.
- ix. "Tibco release toll for business process re-automation", Eugene Grygo, March 2000
- x. "Architecture of the READY Event Notification Service", Gruber et al., 1999

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chad Zhong whose telephone number is (571)272-3946. The examiner can normally be reached on M-F 7:15 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JAROENCHONWANIT, BUNJOB can be reached on (571)272-3913. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CZ  
February 1, 2006



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SUPERVISORY/PATENT EXAMINER